

CLAIMS

- Add A17*
1. A centrifugal separator (10;10';10'') comprising a housing(11), axle means (16) extending along the housing substantially vertically and defining a rotation axis, a rotor(20) rotatable about the rotation axis about said axle means and including at each end thereof a bush (31,32;31,32';32'') surrounding the axle means defining a journal bearing, each said bush being exposed to lubricant supplied to the rotor such that lubricant can pass between said bush and axle means to form therein a film, at least one of the bushes (31;32';31,32'') providing weight thrust bearing means (40;40';40'') operable to support the weight of the rotor, at least during wind-down, characterised in that the weight thrust bearing means (40;40';40'') comprises at least one portion (43) of said axle means tapering from a lower region of greater diameter (41) to an upper region of lesser diameter(42) and said bush surrounding the portion conforming to the taper, defining a combined journal and thrust bearing whereby the rotor carried by the thrust bearing is centered with respect to the axle means and supported both radially and axially.
2. A centrifugal separator as claimed in claim 1 characterised in that the end of the upper bush (32;32'') exposed to lubricant pressure is a lesser diameter than the upper end of the lower bush (31;31') such that normal lubricant supply pressure acts to separate the cooperating tapered surfaces of the weight thrust bearing means.
3. A centrifugal separator as claimed in claim 1 or claim 2 characterised in that the weight thrust bearing means (40'') is defined in both upper and lower bushes.

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92**add
B3**add
B1*